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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,801	07/10/2001	David Hugh Muir	29757/P-396	7920

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EXAMINER

ENATSKY, AARON L

ART UNIT	PAPER NUMBER
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3713

DATE MAILED: 09/17/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/901,801

Applicant(s)

MUIR, DAVID HUGH

Examiner

Aaron L Enatsky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

Response to Amendment

Examiner acknowledges receipt of amendment on 06/30/03 and claims 26-48 remain pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 26-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickinson 5,951,397 in view of Rysavy et al. 4,929,935 (Hereafter, Rysavy) in view of Webb et al. 5,216,504 (Hereafter, Webb) and further in view of Buckley et al. 5,969,756 (Hereafter, Buckley). Dickinson teaches of a variety of electronic video games that maybe played in conjunction with a touch-panel display screen (1:10-35) that additionally includes a housing and value input device (Fig. 1). Dickinson does not teach aspects of display alignment. Rysavy teaches a manual process for aligning a touch screen display for solving the well-known issue of display degradation and drift (Abstract and 1:13-35). As Dickinson teaches the use of a touch screen displays, the need is obviated through Rysavy's disclosure to have at minimum, periodic display screen adjustments due to frequent misalignment. Therefore it would have been obvious to one of ordinary skill in the art at the time to

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modify the touch screen game system by Dickinson to include the touch screen alignment system of Rysavy to provide a consistent gaming interface experience for game players. Dickinson in view of Rysavy, while providing for display alignment, do not teach the features of automatic display alignment using a display pattern and an image capture device to process comparisons between actual calibration and known correct calibration. Webb teaches an automatic electronic display testing and alignment system. The aforementioned system displays an alignment object with electronically distinguishable regions defined by video patterns, with multiple different detectable characteristics. The regions and the region characteristics are electronically distinguished through the use of a single camera (2:13-37 and Fig. 1) and the characteristics include color (3:6). Webb also discloses having dynamic search rules to adjust display alignment (Fig. 11) following a dynamically determined path shown as following subsequent pixels during search rule implementation (Fig. 3 and 4) and a plurality of stored values indicating coordinates of a predetermined alignment object which is used for comparison of the captured alignment object (14:46-48) to determine whether correct alignment tolerances have been reached. As Dickinson in view of Rysavy teach manual adjustment of a touch screen gaming device one of ordinary skill would generally be motivated to automate a manual process. Automation is further obvious through Webb's motivation to create a fast, flexible, and cost effective process over previous manual operations. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the sensor and calibration techniques taught by Webb to create a cost effective touch screen calibration gaming machine taught by Dickinson in view of Rysavy. Dickinson in view of Rysavy in view of Webb however, does not teach a plurality of unique characteristics in each of the plurality of video patterns. Buckley teaches a test and alignment system for electronic display devices that uses a plurality of

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unique characteristics in each of a plurality of video pattern regions (Fig. 8). One would be motivated to modify Dickinson in view of Rysavy in view of Webb to use the plurality of characteristically unique video patterns taught by Buckley because improved testing systems are continually being sought (2:28-30) where the plurality of different patterns would allow a greater series of tests to be performed, which would increase the accuracy of the tests. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dickinson in view of Rysavy in view of Webb to use the increased video patterns described by Buckley to create finer grained tests to increase accuracy of alignment procedures.

In regard to rules used to calibrate the touch screen gaming machine, Webb teaches a dynamic search rule as discussed above, where it is obvious that the conditional tree structured, spiral reduction, and iterative adaptive rules are obvious equivalents that are interchangeable with the dynamic rule without teaching away from the above reference.

Response to Arguments

Applicant's arguments filed 6/30/00 have been fully considered but they are not persuasive.

Applicant has amended claims to include the limitation of a sensor "having a field of view" and a "second video image being larger than the field of view of the sensor". Applicant also provides arguments with respect to how these features are not presented in the Office Action (OA) of paper no. 8. Applicant's alleged difference between the instant invention and the OA is directed to the breadth of image sensors sample size taught by Webb. Applicant believes that because Webb teaches an image capture that includes the entire screen, Applicant's smaller image capture technique is patently different. Examiner is unconvinced, and believes that test procedures use the same analysis process to produce the correct alignment. The video test patterns in both, Dickinson in view of

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Rysavy in view of Webb in view of Buckley and the instant application, are used by the alignment process to determine the coordinate positions of the displayed screen relative to how the pattern should be displayed. Regardless of the size of the image sample, the patterns are used to distinguish one area from the next. Furthermore, the patterns detected provide a coordinate reference that allows a comparison of the actual versus the intended display alignment properties (Webb Fig. 11). The instant invention merely mimics the process by designating a portion of the screen to display a pattern, while surrounding the pattern with other different patterns. The image captured distinguishes the image based upon the pattern, and uses the pattern to determine the actual displayed coordinates versus the intended display coordinates. Thus Examiner holds the argument as unconvincing.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron L Enatsky whose telephone number is 703-305-3525. The examiner can normally be reached on 8-6 M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teresa Walberg can be reached on 703-308-1327. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

Aaron Enatsky
September 11, 2003


Teresa Walberg
Supervisory Patent Examiner
Group 3700